12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- Features a downtilt range of 0-10° to provide for improved interference performance
- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4x MIMO) capability for Band 14, AWS, PCS and WCS applications.
- Independent tilt for all arrays.
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics

### Electrical Specifications

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Gain, dBi</td>
<td>16.1</td>
<td>16.5</td>
<td>17.1</td>
<td>17.7</td>
<td>17.8</td>
<td>18.3</td>
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<tr>
<td>Beamwidth, Horizontal, degrees</td>
<td>75</td>
<td>74</td>
<td>59</td>
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<td>60</td>
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<td>Beamwidth, Vertical, degrees</td>
<td>8.1</td>
<td>7.3</td>
<td>7.7</td>
<td>7.1</td>
<td>6.6</td>
<td>5.9</td>
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<tr>
<td>Beam Tilt, degrees</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
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<tr>
<td>USLS (First Lobe), dB</td>
<td>14</td>
<td>15</td>
<td>20</td>
<td>20</td>
<td>18</td>
<td>18</td>
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<tr>
<td>Front-to-Back Ratio at 180°, dB</td>
<td>29</td>
<td>30</td>
<td>38</td>
<td>37</td>
<td>35</td>
<td>36</td>
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<tr>
<td>Isolation, Inter-band, dB</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
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<tr>
<td>VSWR</td>
<td>Return Loss, dB</td>
<td>1.5</td>
<td>14.0</td>
<td>1.5</td>
<td>14.0</td>
<td>1.5</td>
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<tr>
<td>PIM, 3rd Order, 2 x 20 W, dBc</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
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<tr>
<td>Input Power per Port at 50°C, maximum, watts</td>
<td>350</td>
<td>350</td>
<td>300</td>
<td>300</td>
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<td>Polarization</td>
<td>±45°</td>
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<td>±45°</td>
<td>±45°</td>
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<tr>
<td>Impedance</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
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</table>

### Electrical Specifications, BASTA*

<table>
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<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>15.6</td>
<td>16.3</td>
<td>16.4</td>
<td>17.3</td>
<td>17.4</td>
<td>17.8</td>
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<tr>
<td>Gain by all Beam Tilts Tolerance, dB</td>
<td>±0.5</td>
<td>±0.5</td>
<td>±0.9</td>
<td>±0.5</td>
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<tr>
<td>Gain by Beam Tilt, average, dBi</td>
<td>2 °</td>
<td>15.5</td>
<td>2 °</td>
<td>16.3</td>
<td>2 °</td>
<td>16.3</td>
</tr>
<tr>
<td>Beamwidth, Horizontal Tolerance, degrees</td>
<td>±4.6</td>
<td>±3.3</td>
<td>±4.3</td>
<td>±1.9</td>
<td>±2.8</td>
<td>±3.3</td>
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<tr>
<td>Beamwidth, Vertical Tolerance, degrees</td>
<td>±0.5</td>
<td>±0.3</td>
<td>±0.4</td>
<td>±0.4</td>
<td>±0.4</td>
<td>±0.2</td>
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<tr>
<td>USLS, beampeak to 20° above beampeak, dB</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Front-to-Back Total Power at 180° ± 30°, dB</td>
<td>24</td>
<td>24</td>
<td>30</td>
<td>31</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>CPR at Boresight, dB</td>
<td>17</td>
<td>17</td>
<td>18</td>
<td>22</td>
<td>21</td>
<td>19</td>
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<tr>
<td>CPR at Sector, dB</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>9</td>
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</tbody>
</table>
*CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs.*

**Array Layout**

<table>
<thead>
<tr>
<th>Array</th>
<th>Freq (MHz)</th>
<th>Conn</th>
<th>RET (SRET)</th>
<th>AISG RET UID</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>698-896</td>
<td>1-2</td>
<td>1</td>
<td>CPxxxxxxxxxxxxxxmm.1</td>
</tr>
<tr>
<td>R2</td>
<td>698-896</td>
<td>3-4</td>
<td>2</td>
<td>CPxxxxxxxxxxxxxxmm.2</td>
</tr>
<tr>
<td>Y1</td>
<td>1695-2360</td>
<td>5-6</td>
<td>3</td>
<td>CPxxxxxxxxxxxxxxmm.3</td>
</tr>
<tr>
<td>Y2</td>
<td>1695-2360</td>
<td>7-8</td>
<td>4</td>
<td>CPxxxxxxxxxxxxxxmm.4</td>
</tr>
<tr>
<td>Y3</td>
<td>1695-2360</td>
<td>9-10</td>
<td>5</td>
<td>CPxxxxxxxxxxxxxxmm.5</td>
</tr>
<tr>
<td>Y4</td>
<td>1695-2360</td>
<td>11-12</td>
<td>6</td>
<td>CPxxxxxxxxxxxxxxmm.6</td>
</tr>
</tbody>
</table>

*(Sizes of colored boxes are not true depictions of array sizes)*

**Port Configuration**
General Specifications

**Operating Frequency Band**
1695 – 2360 MHz | 698 – 896 MHz

**Antenna Type**
Sector

**Band**
Multiband

**Performance Note**
Outdoor usage

**Total Input Power, maximum**
1,800 W @ 50 °C

Mechanical Specifications

**RF Connector Quantity, total**
12

**RF Connector Quantity, low band**
4

**RF Connector Quantity, high band**
8

**RF Connector Interface**
4.3-10 Female

**Grounding Type**
RF connector inner conductor and body grounded to reflector and mounting bracket

**Radiator Material**
Low loss circuit board

**Radome Material**
Fiberglass, UV resistant

**Reflector Material**
Aluminum

**RF Connector Location**
Bottom

**Wind Loading, frontal**
1,070.0 N @ 150 km/h | 240.5 lbf @ 150 km/h

**Wind Loading, lateral**
375.0 N @ 150 km/h | 84.3 lbf @ 150 km/h

**Wind Loading, maximum**
1,385.0 N @ 150 km/h | 311.4 lbf @ 150 km/h

**Effective Projected Area (EPA), frontal**
1.00 m² | 10.76 ft²

**Effective Projected Area (EPA), lateral**
0.35 m² | 3.77 ft²

**Wind Speed, maximum**
241 km/h | 150 mph

Dimensions

**Length**
2688.0 mm | 105.8 in

**Width**
498.0 mm | 19.6 in

**Depth**
197.0 mm | 7.8 in

**Net Weight, without mounting kit**
52.5 kg | 115.7 lb

Remote Electrical Tilt (RET) Information

**Input Voltage**
10–30 Vdc

**Internal RET**
High band (4) | Low band (2)

**Power Consumption, idle state, maximum**
1 W

**Power Consumption, normal conditions, maximum**
8 W

**Protocol**
3GPP/AISG 2.0 (Multi-RET)

**RET Hardware**
CommRET v2
NNH4-65D-R6

RET Interface
8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity
1 female | 1 male

Packed Dimensions
Length 2880.0 mm | 113.4 in
Width 608.0 mm | 23.9 in
Depth 352.0 mm | 13.9 in
Shipping Weight 76.5 kg | 168.7 lb

Regulatory Compliance/Certifications

Agency Classification
RoHS 2011/65/EU Compliant by Exemption
ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014 Above Maximum Concentration Value (MCV)

Included Products

BSAMNT-4 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

BSAMNT-M4 — Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance